

Participation in biomedical research is an imperfect moral duty: a response to John Harris

Sandra Shapshay, Kenneth D Pimble

J Med Ethics 2007;33:414–417. doi: 10.1136/jme.2006.017384

In his paper "Scientific research is a moral duty", John Harris argues that individuals have a moral duty to participate in biomedical research by volunteering as research subjects. He supports his claim with reference to what he calls the principle of beneficence as embodied in the "rule of rescue" (the moral obligation to prevent serious harm), and the principle of fairness embodied in the prohibition on "free riding" (we are obliged to share the sacrifices that make possible social practices from which we benefit). His view that biomedical research is an important social good is agreed upon, but it is argued that Harris succeeds only in showing that such participation and support is a moral good, among many other moral goods, while failing to show that there is a moral duty to participate in biomedical research in particular. The flaws in Harris's arguments are detailed here, and it is shown that the principles of beneficence and fairness yield only a weaker discretionary or imperfect obligation to help others in need and to reciprocate for sacrifices that others have made for the public good. This obligation is discretionary in the sense that the individuals are free to choose when, where, and how to help others in need and reciprocate for earlier sacrifices. That Harris has not succeeded in claiming a special status for biomedical research among all other social goods is shown here.

In our judgement, Harris makes a serious rhetorical mistake by engaging in hyperbole. For example, Harris cites paragraph A.5 of the World Medical Association's "Ethical principles for medical research involving human subjects",² commonly referred to as the Declaration of Helsinki.

In medical research on human subjects, considerations related to the well-being of the human subject should take precedence over the interests of science and society.

According to Harris, "this paragraph is widely cited in support of restrictions on scientific research and is interpreted as requiring that all human subject research is in the narrowly conceived interests of the research subjects themselves. This article of faith has become almost unchallengeable." (p 243).

Unfortunately, Harris does not offer a single citation to support this claim. We know of no instance in which this paragraph has been so narrowly construed, and we suggest that such a construal conflates research with therapy, which is obviously contrary to the purpose of the Declaration. Indeed, Harris's later interpretation of this paragraph accords closely with our own, and, in our belief, with the majority opinion: "To say that the interests of the subject must take precedence over those of others...must be understood as a way of reasserting that a researcher's narrowly conceived professional interest must not have primacy over the human rights of research subjects." (p 244).

Harris also hyperbolises in his first sentence, stating: "Science is under attack", and admonishes us to remember "the powerful moral obligation there is to undertake, support, and participate in scientific research, particularly biomedical research, and the powerful moral imperative that underpins these obligations" (p 242). But by the end of his article, he qualifies the moral duty to participate in biomedical research nearly out of existence.

Here, our aim is to show that Harris's arguments succeed only in showing that such participation and support is one moral good among many, but that there is no moral duty to support and/or participate in biomedical research per se, except, perhaps, in rare emergency situations. We will show this by focusing on the two major ethical principles that Harris employs: the principles of beneficence and fairness. We will detail why each ethical principle yields only a weaker discretionary obligation to help others in need and to reciprocate

In his paper "Scientific research is a moral duty", John Harris' intends to encourage individuals to volunteer as subjects in biomedical research by arguing that supporting biomedical research is a moral obligation, both for individuals and society. Although we agree that biomedical research is an important social good, we find Harris's arguments for the thesis that individuals have a moral duty to participate in serious scientific research to be unconvincing.

Most of Harris's arguments concern the moral duty of individuals, on which we will focus our attention. In our view, the moral duty of a society to support biomedical research is better approached separately.

The bulk of this paper will concern Harris's substantive arguments in making his case that those of us who have benefited from modern medical science—virtually all of us living in industrialised nations—have a moral obligation to volunteer as research subjects, but first we wish to touch briefly on his rhetorical strategy.

See end of article for authors' affiliations

Correspondence to: Dr S Shapshay, Department of Philosophy, Indiana University, 1033 E Third Street, Bloomington, IN 47405, USA; sshapsha@indiana.edu

Received 24 May 2006
Revised 28 June 2006
Accepted 29 June 2006

for sacrifices that others have made for the public good.

THE PRINCIPLE OF BENEFICENCE

Harris claims polemically that “the overwhelming presumption has been and remains that participation in research is a supererogatory, and probably a reckless, act, not an obligation.” (p 242). This presumption should be abandoned, he argues, based on the “rule of rescue”:

Where our actions will, or may probably prevent serious harm then if we can reasonably (given the balance of risk and burden to ourselves and benefit to others) we clearly should act because to fail to do so is to accept responsibility for the harm that then occurs. (p 242)

He calls this rule “the stronger side” of the principle of beneficence, the duty to help others in need.ⁱ

On this basis of the rule of rescue, Harris argues that if our actions can prevent some harm, and we can reasonably perform those actions, then we ought so to act. This understanding of the principle is reminiscent of Singer’s³ famous statement: “If it is in our power to prevent something bad from happening, without thereby sacrificing anything of comparable moral importance, we ought, morally, to do it.” Singer supports this obligation through the pond case: Imagine you are the only adult in view when you see a toddler drowning in a shallow pond. Clearly, you should rescue the child even if your clothes will be drenched.

However, the rule of rescue in the case of biomedical research would have to be derived from a rather different case: 50 agents surround the pond and 20 toddlers are in distress: one child is drowning, another is lost, a third is being attacked by a dog, etc, and neither you nor any of the other agents is uniquely situated to help any particular child. In this more analogous case, it would be strange to argue that every agent is obliged to save the drowning child, especially at the cost of the other 19 children. Clearly, each agent may justifiably choose which child to help.ⁱⁱ

Harris’s application of the rule of rescue can be schematised as follows:

1. If our actions can prevent serious harm, and we can reasonably perform those actions, then we ought to act so.
2. Many diseases cause serious harm.
3. Medical research is a necessary component of preventing or relieving those harms.
4. Therefore, if we can take reasonable steps to further medical research (by volunteering as a research participant), we have an obligation to do so.

We accept premises 2 and 3 as true statements. However, premise 1 requires further specification: we should determine whether our moral duty to prevent serious harm when we reasonably can means that we have a duty

- (a) to prevent any and all serious harm whenever we reasonably can; or

ⁱThis section of Harris’s article is confused. It is headed “Do no harm” and cites “the duty not to harm others”, which we would call “non-maleficence”. We agree that the obligation of non-maleficence is stronger than the obligation of beneficence, but the rule of rescue falls more happily under beneficence (which involves taking positive actions to do good) than non-maleficence (which involves avoiding or refraining from actions that cause harm).

ⁱⁱWe are indebted to an anonymous reviewer for bringing this significant disanalogy to our attention.

- (b) to prevent only the most serious harm when we reasonably can; or
- (c) to prevent some subset of serious harm of our own choice when we reasonably can.

It seems that in order for Harris’s argument to be valid, he must call on (a), the most general and stringent formulation. If our duty were only to prevent (b) the most serious harm, or if our duty were to prevent (c) some subset of serious harm of our own choice, it is not clear why the serious harms caused by disease in particular should necessarily entail a claim on us for our help. With the less general formulations of the rule of rescue, one might justifiably decide to prevent other forms of serious harm, say, political persecution, or illiteracy. It is only if we are duty-bound to prevent any and all serious harms when we reasonably can that we are obliged to prevent disease in particular. Without the most general formulation, we would be quite justified in working to prevent harm to at-risk youth instead of participating in biomedical research, even if we were reasonably capable of so participating.

But the most general formulation of the rule of rescue, “that we ought to prevent any and all serious harm, when we reasonably can”, is implausible largely because it is over-demanding. Otherwise put, this form of the rule of rescue amounts to the act utilitarian injunction, always to act so as to minimise harm or bad states of affairs (the negative construal of the principle of utility). Bernard Williams⁴ has forcefully criticised act utilitarianism on the grounds that it “makes integrity as a value more or less unintelligible” because it enjoins the agent to factor his or her own deepest commitments and projects in life equally alongside all the other factors in the utility calculus. As there are, as a matter of fact, so many opportunities to minimise harm, one is duty-bound to devote most of one’s time and resources to preventing poverty, hunger, war and any number of other serious harms, rather than to other less useful projects.

A person who consistently acts on this formulation of the rule of rescue would become nothing more than “a channel between the input of everyone’s projects, including his own, and an output of optimific decision”. This principle thus reduces him to a harm-minimising conduit and destroys his personal integrity—the union of his actions with his own deepest convictions and projects in life. With Williams,⁴ we argue, the most general formulation of the rule of rescue is profoundly alienating.

It might be argued that the qualifier “when we reasonably can” salvages individual integrity; it can hardly be considered “reasonable” to expect everyone to abandon all of their personal goals to minimise all serious harm. If this is what Harris intends, however, he is in fact endorsing a weaker formulation of the principle of beneficence, (c) above: where we reasonably can, we ought to prevent some subset of serious harm, of our own choice. If we do adopt this weaker formulation, we are left without a duty to participate in biomedical research per se. Rather, we are left with an imperfect duty to choose from all possible harms those which we will strive to prevent.

A Kantian imperfect duty is a duty to adopt certain ends—one’s own perfection and the happiness of others. Accordingly, one may not totally neglect the happiness of others or the perfection of oneself, but one has a good deal of latitude in what one does to achieve these ends. According to Kant scholar Thomas Hill,

imperfect duties allow us to do what we please on some occasions ... [f]or example, though we have an imperfect duty of beneficence we may sometimes pass over an

opportunity to make others happy simply because we would rather do something else.⁵

Despite some controversy concerning just how much latitude Kantian imperfect duties allow,⁶ on reading (c) of Harris's principle, one may surely discharge one's imperfect obligation to prevent harm to others by volunteering at an animal shelter, or by donating money to Oxfam, or by participating in medical research—but one cannot be said to have a duty to do the latter, in particular.

Perhaps Harris's argument could be saved by use of version (b) of the rule of rescue—namely, “we have an obligation to prevent the most serious harm, when we reasonably can.” By this formulation, one would be obliged to address only the most serious harms one reasonably could. Surely, the most significant harms facing people in the world today are not those which must be addressed through biomedical research. Citing statistics from the United Nations Development Report of 2002, Thomas Pogge⁷ writes,

poverty is far and away the most important factor in explaining health deficits. Because they are poor, 815 million persons are malnourished, 1.1 billion lack access to safe water, 2.4 billion lack access to basic sanitation, more than 880 million lack access to health services, and approximately 1 billion have no adequate shelter.

This staggering amount of suffering is due to preventable poverty, not due to disease.

Furthermore, Pogge argues that much poverty is due to global institutions (lending and trade practices) that exploit poor nations. Citizens of democratic, industrialised nations are thus materially implicated in the poverty-related harms caused in part by global institutions. It stands to reason that we have much more of an obligation to rectify the injustice that our own democratically elected governments have caused than to try to alleviate disease-related suffering in which we are not materially implicated. If we accept formulation (b) of the rule of rescue, we ought rather to work to change unjust institutions that foster poverty rather than participate in biomedical research.

We have analysed the rule of rescue following Harris's lead, but a similar analysis could be done along any of a number of dimensions:

- Are we obliged to rescue only persons in our own household, or those in our physical presence, or those we know to exist, or any potential persons (those untold billions not yet born)?
- Are we obliged to prevent only obvious and imminent harms, or likely harms, or potential but unlikely harms?
- Are we required to take action only if it will assure the prevention of harm, or if it is likely to prevent harm, or if it might possibly prevent harm?

We believe that the conclusion would be the same no matter which of these dimensions were pursued: the more extreme and stringent a formulation, the less reasonable it is to construe it as a perfect moral obligation.

Essentially, the main problem with Harris's overall argument so far is that he sets up a false dilemma: either participation in research is supererogatory or it is a positive and perfect moral obligation. However, there is a third possibility: The rule of rescue may constitute an “imperfect obligation”, meaning that we must make others' happiness our end, and act in good faith to help some others some of the time, but we may justifiably use our own discretion as to whom, how and how much to help.ⁱⁱⁱ Thus, we can say that participation in research per se is

not morally obligatory, but neither is it supererogatory; it is one way in which people may choose to discharge their imperfect obligation to help others.

THE PRINCIPLE OF FAIRNESS

The second principle which Harris invokes to show that we have a positive moral obligation to support/participate in biomedical research, is the principle of fairness developed by H L A Hart⁸ and John Rawls⁹. As Harris puts it, as all of us (at least all members of industrialised countries^{iv}) benefit from the existence of medical research, and we all accept these benefits (eg, through vaccines, public sanitation, personal medical services, etc), “we have an obligation in justice to contribute to the social practice which produces them.”ⁱ In other words, if one accepts the benefits of biomedical research, then one ought to support the endeavour which makes those benefits possible in the first place; otherwise one would be acting unfairly as a “free rider”.

Although this line of argument is far more promising than the previous one, it does not stand up to close scrutiny. Let us begin with a literal free-rider scenario. For the sake of argument, assume that the Berlin S-Bahn system runs more efficiently when all riders pay for and stamp their own tickets, with minimal enforcement. On the basis of this added efficiency, every resident of Berlin enjoys more generous public services. Hans, who is wealthy, decides that he will derive maximal personal benefit if he does not pay to ride—he enjoys all of the advantages of others' cooperation, but does not pay the price. Clearly Hans's action is unfair, and he has a perfect duty not to act unfairly in this way.

Harris implicitly draws a parallel between the classic free rider and the individual who benefits from but who does not personally participate in biomedical research. But there are two significant differences between these situations. The first difference concerns one's freedom to choose to use the benefit. In the case of Hans, he is certainly free not to ride the S-Bahn if he does not want to pay. He could walk or bike instead. But the beneficiary of biomedical research is not similarly free not to enjoy the fruits of the research. In our modern industrialised societies, as a child one does not choose to be immunised or brought up with modern sanitation. An adult could certainly decline further enjoyment of such benefits, but, as the benefits of biomedical research are ubiquitous in modern society, this would require one to move to the wilderness or what's left of it.

This disanalogy is morally significant because, if one does not truly choose to accept the benefits of such research, it is hard to see how one is thereby responsible for supporting the institutions that bestow those benefits, whereas Hans, our free rider, must explicitly choose to ride the S-Bahn and is thus responsible for playing fair by paying the fare.

Furthermore, the people who are harmed by Hans's free riding are the same people who would benefit from his cooperation. This is not likely to be the case with participation in medical research, where, due to the lag between trials and interventions, one generally benefits from past participation and is likely to benefit those in the future, not present participants in research.^v Even if I owe a duty of reciprocity

ⁱⁱⁱWe are arguing that the rule of rescue may be seen as an imperfect duty when an agent is not uniquely situated to do the rescuing.

^{iv}Except, of course, in the US, where approximately 46 million people do not have reliable access to healthcare. By Harris's account, the principle of fairness would compel Britons more strongly than Americans to support biomedical research because in the US such research is not a truly public good.

^vWe gained an appreciation of this salient point from an anonymous reviewer.

to those living people who participated in medical research, or to the descendants of those who participated in the past, if I have benefited from vaccinations, am I obliged to participate in vaccination research? What about mental health research? The list can be extended indefinitely. As in the case of beneficence, the more comprehensively a moral duty is construed, the less credible it is.

To the extent that we are obliged to discharge our debts for benefits “in kind”, we can find ourselves with directly conflicting moral obligations. If not for the service of Allied military men and women, we would be living under a Nazi dictatorship; therefore, we have a moral obligation to enlist in the military. But if not for the sacrifices of conscientious objectors and war protesters, governments would be less constrained in choosing when to go to war; therefore, we should resist military operations.

There are many ways in which we ought to refrain from “free riding”, but we cannot reasonably be expected to do them all. Harris might reply that those who have many other obligations imposed on them by the principle of fairness can only reasonably be expected to reciprocate—namely, biomedical research when it is easy for them to do so. He cites two examples of obligatory participation in biomedical research when doing so seems not to be in one’s best interest, narrowly construed:

If I am asked to give a blood sample for a worthwhile research project, or if I am asked if tissue removed during an operation may be retained for research or therapeutic use [I should accede].¹

This is what the duty to participate in biomedical research boils down to for Harris: when participation requires nothing more than a minor inconvenience, you should. We find it difficult to disagree with this extraordinarily modest conclusion, which is akin to asserting that telling the truth is a moral duty as long as it is convenient to do so.

But at this point, Harris implicitly concedes that the obligation to participate in biomedical research is only part of a discretionary duty to help others. In the cases Harris mentions, the demands are quite trivial. Insofar as the demand of participating is greater, in terms of time, hardship or risk, a person is justified in spending his or her time, money and effort in discharging her imperfect obligations in another way.

CONCLUSIONS

We have argued, contra Harris, that any duty to participate in biomedical research must be understood as part of a more general imperfect duty to promote the welfare of others. Any candid attempt to persuade people to volunteer as research participants should acknowledge this, emphasising that such participation helps to sustain a moral good.

While Harris does not succeed in proving the point he set out to prove, his line of reasoning supports what we believe is an important conclusion: we have a general obligation to support just institutions insofar as we benefit from them. The principle of fairness better supports a societal obligation to promote research in a way that protects subjects and distributes the fruits of research fairly. But, as individuals faced with multiple worthy collective enterprises, and finite lives, we must each decide how to discharge our duty to do our fair share, rather than being browbeaten into choosing one tactic over another.

ACKNOWLEDGEMENTS

We acknowledge the support of Indiana University, the Poynter Center for the Study of Ethics and American Institutions and the Indiana University Center for Bioethics. We would also like to thank an anonymous reader for the *Journal of Medical Ethics* for constructive criticism.

Authors’ affiliations

Sandra Shapshay, Department of Philosophy, Indiana University, Bloomington, Indiana, USA

Kenneth D Pimple, Poynter Center for the Study of Ethics and American Institutions, Indiana University, Bloomington, Indiana, USA

Competing interests: None.

REFERENCES

- 1 **Harris J.** Scientific research is a moral duty. *J Med Ethics* 2005;**31**:242–8.
- 2 **World Medical Association.** Declaration of Helsinki: ethical principles for medical research involving human subjects, 2004. <http://www.wma.net/e/policy/b3.htm> (accessed 1 Mar 2007).
- 3 **Singer P.** Famine, affluence, and morality. *Philos Public Aff* 1972;**1**:229–43.
- 4 **Williams B.** A critique of utilitarianism. In: Smart JJC, Williams B, eds. *Utilitarianism, for and against*. Cambridge: Cambridge University Press, 1990:82–117.
- 5 **Hill TE.** *Dignity and practical reason in Kant’s moral theory*. Ithaca: Cornell University Press, 1992.
- 6 **Baron M.** *Kantian ethics almost without apology*. Ithaca: Cornell University Press, 1995.
- 7 **Pogge T.** Responsibilities for poverty-related ill health. *Ethics Int Aff* 2002;**16**:71–9.
- 8 **Hart HLA.** Are there any natural rights? *Oxford Review* No. 4 1967.
- 9 **Rawls J.** *A theory of justice*. Cambridge: Harvard University Press, 1971.